AMENDMENT TO THE CLAIMS

1.(**Currently Amended**) A transmission amplifier for amplifying a signal to be transmitted, ~~characterized by~~ wherein comprising:

an amplifying unit that amplifies the signal;

temperature detecting means that detects temperature; and

amplifying-unit-self-heating-facilitation control means that performs control for facilitating self-heating by the amplifying unit when temperature detected by the temperature detecting means is lower than a predetermined threshold value or equal to or lower than the predetermined threshold value.

2.(**Currently Amended**) A transmission amplifier according to claim 1, ~~characterized in that~~ wherein the amplifying-unit-self-heating-facilitation control means performs bias control for the amplifying unit as the control for facilitating self-heating by the amplifying unit.

3.(**Currently Amended**) A transmission amplifier according to claim 1 ~~or 2~~, ~~characterized in that~~ wherein

a predetermined first threshold value is provided concerning temperature and a predetermined second threshold value, which is low compared with the first threshold value, is provided, and

the amplifying-unit-self-heating-facilitation control means performs the control for

facilitating self-heating by the amplifying unit when temperature detected by the temperature detecting means is lower than the second threshold value or equal to or lower than the second threshold value and stops the control for facilitating self-heating by the amplifying unit when temperature detected by the temperature detecting means exceeds the first threshold value or rises to be equal to or higher than the first threshold value.

4.(**Currently Amended**) A transmission amplifier according to ~~any one of claims 1 to 3, characterized in that~~ claim 1, wherein

the amplifying unit is constituted by using plural amplifying elements, and

the amplifying-unit-self-heating-facilitation control means performs bias control for the plural amplifying elements as the control for facilitating self-heating by the amplifying unit.

5.(**Currently Amended**) A transmission amplifier according to ~~any one of claims 1 to 4, characterized by~~ claim 1, wherein comprising amplifying-unit-self-heating-control-time-signal attenuating means that attenuates a signal to be amplified by the amplifying unit when the control for facilitating self-heating by the amplifying unit is performed by the amplifying-unit-self-heating-facilitation control means.

6.(**New**) A transmission amplifier according to claim 1, wherein

a predetermined first threshold value is provided concerning temperature and a predetermined second threshold value, which is low compared with the first threshold

value, is provided, and

the amplifying-unit-self-heating-facilitation control means performs the control for facilitating self-heating by the amplifying unit when temperature detected by the temperature detecting means is lower than the second threshold value or equal to or lower than the second threshold value and stops the control for facilitating self-heating by the amplifying unit when temperature detected by the temperature detecting means exceeds the first threshold value or rises to be equal to or higher than the first threshold value.

7.(**New**) A transmission amplifier according to claim 2, wherein

the amplifying unit is constituted by using plural amplifying elements, and

the amplifying-unit-self-heating-facilitation control means performs bias control for the plural amplifying elements as the control for facilitating self-heating by the amplifying unit.

8.(**New**) A transmission amplifier according to claim 3, wherein

the amplifying unit is constituted by using plural amplifying elements, and

the amplifying-unit-self-heating-facilitation control means performs bias control for the plural amplifying elements as the control for facilitating self-heating by the amplifying unit.

9.(**New**) A transmission amplifier according to claim 2, wherein comprising amplifying-unit-self-heating-control-time-signal attenuating means that attenuates a signal to be

amplified by the amplifying unit when the control for facilitating self-heating by the amplifying unit is performed by the amplifying-unit-self-heating-facilitation control means.

10.(**New**) A transmission amplifier according to claim 3, wherein comprising amplifying-unit-self-heating-control-time-signal attenuating means that attenuates a signal to be amplified by the amplifying unit when the control for facilitating self-heating by the amplifying unit is performed by the amplifying-unit-self-heating-facilitation control means.

11.(**New**) A transmission amplifier according to claim 4, wherein comprising amplifying-unit-self-heating-control-time-signal attenuating means that attenuates a signal to be amplified by the amplifying unit when the control for facilitating self-heating by the amplifying unit is performed by the amplifying-unit-self-heating-facilitation control means.